

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

3900.55

June 19, 1997

SAFETY ALERT - Integrated Communications Switching System (ICSS)

SUBJ:

1. **PURPOSE.** This order provides safety alert information regarding a potential electrical shock hazard related to the ICSS.
2. **DISTRIBUTION.** This order is distributed to the division level in Airway Facilities, Air Traffic, and the Office of Communication, Navigation, and Surveillance Systems in headquarters; to the branch level in regional Airway Facilities and Air Traffic Divisions; and to all Airway Facilities and Air Traffic field offices and facilities with a limited distribution.
3. **INFORMATION.** Within the last year there have been three reported incidents of Air Traffic Control Specialists (ATCS) receiving electrical shock at a position while they were plugged into the ICSS. At one facility two separate incidents occurred, one in June 1996 and the second in March 1997. Both of these incidents occurred at the same air traffic position and the ATCSs received medical attention. Subsequent investigations by the local Airway Facilities Specialists revealed that the ICSS equipment was properly grounded but the position radar scope was wired improperly and was in fact the source of the electrical shock. This condition was corrected by rewiring the radar scope. A similar incident recently occurred at a different facility when the ATCS was plugged into the ICSS jack and touched an interphone button on the ICSS panel. This incident also required the ATCS to receive medical attention.

Distribution: A-W (AF/AT/ND) - 2; A-X (AF/AT) - 2;
A-Y (FAF/FAT) - 0 (LTD)

Initiated By: ANS - 600

4. **ACTION.** Investigations should be conducted at all Terminal Radar Approach Control (TRACON) facilities where ICSS equipment is configured with radar display units to ensure that the equipment is properly grounded, and that proper wiring is done on the radar scopes. The following documents contain the technical guidance that should be adhered to for proper protection:

a. FAA-STD-019B, Lightning Protection, Grounding, Bonding, and Shielding Requirements for Facilities.

b. FAA Order 6950.19A, Practices and Procedures for Lightning Protection, Grounding, Bonding, and Shielding Implementation.

c. FAA Order 6950.20, Fundamental Considerations of Lightning Protection, Grounding, Bonding, and Shielding.



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